

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/997,931

DATE: 12/07/2001  
TIME: 13:38:04

Input Set : A:\220.00010150.ST25.txt  
Output Set: N:\CRF3\12072001\I997931.raw

**ENTERED**

3 <110> APPLICANT: University of Rochester  
4 Kool, Eric  
6 <120> TITLE OF INVENTION: CIRCULAR DNA VECTORS FOR SYNTHESIS OF RNA AND DNA  
8 <130> FILE REFERENCE: 220.00010142  
C--> 10 <140> CURRENT APPLICATION NUMBER: US/09/997,931  
C--> 10 <141> CURRENT FILING DATE: 2001-11-30  
10 <150> PRIOR APPLICATION NUMBER: US 09/569,344  
11 <151> PRIOR FILING DATE: 2000-05-11  
13 <150> PRIOR APPLICATION NUMBER: US 08/805,631  
14 <151> PRIOR FILING DATE: 1997-02-26  
16 <150> PRIOR APPLICATION NUMBER: US 08/393,439  
17 <151> PRIOR FILING DATE: 1995-02-23  
19 <150> PRIOR APPLICATION NUMBER: US 08/047,860  
20 <151> PRIOR FILING DATE: 1993-04-15  
22 <160> NUMBER OF SEQ ID NOS: 129  
24 <170> SOFTWARE: PatentIn version 3.1  
26 <210> SEQ ID NO: 1  
27 <211> LENGTH: 34  
28 <212> TYPE: DNA  
29 <213> ORGANISM: Artificial Sequence  
31 <220> FEATURE:  
32 <223> OTHER INFORMATION: linear precircle oligonucleotide  
34 <400> SEQUENCE: 1  
35 aaagaagagg gaagaaagaa aaggggtgga aaag 34  
38 <210> SEQ ID NO: 2  
39 <211> LENGTH: 34  
40 <212> TYPE: DNA  
41 <213> ORGANISM: Artificial Sequence  
43 <220> FEATURE:  
44 <223> OTHER INFORMATION: oligonucleotide product which has an MnlI enzyme cleavage  
site at  
45 its end  
47 <400> SEQUENCE: 2  
48 ttttccaccc cttttctttc ttccctcttc tttc 34  
51 <210> SEQ ID NO: 3  
52 <211> LENGTH: 34  
53 <212> TYPE: DNA  
54 <213> ORGANISM: Artificial Sequence  
56 <220> FEATURE:  
57 <223> OTHER INFORMATION: template circle  
59 <400> SEQUENCE: 3  
60 gaaagaagag ggaagaaaga aaaggggtgg aaaa 34  
63 <210> SEQ ID NO: 4  
64 <211> LENGTH: 204  
65 <212> TYPE: DNA  
66 <213> ORGANISM: Artificial Sequence  
68 <220> FEATURE:  
69 <223> OTHER INFORMATION: multimer

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71 <400> SEQUENCE: 4
72 ttttccaccc cttttctttc ttccctcttc tttcttttcc accccttttc tttcttccct      60
74 cttctttctt ttccaccctt tttctttctt cctctcttct tcttttccac cccttttctt      120
76 tcttccctct tctttctttt ccaccctttt tctttcttcc ctcttctttc ttttccaccc      180
78 cttttctttc ttccctcttc ttctt                                     204
81 <210> SEQ ID NO: 5
82 <211> LENGTH: 26
83 <212> TYPE: DNA
84 <213> ORGANISM: Artificial Sequence
86 <220> FEATURE:
87 <223> OTHER INFORMATION: circular template
89 <400> SEQUENCE: 5
90 caaaaaaaaa aaacaaaaaaaa aaaaaa                                     26
93 <210> SEQ ID NO: 6
94 <211> LENGTH: 29
95 <212> TYPE: DNA
96 <213> ORGANISM: Artificial Sequence
98 <220> FEATURE:
99 <223> OTHER INFORMATION: multimer
101 <400> SEQUENCE: 6
102 tttgtttttt tttttgtttt tttttttt                                     29
105 <210> SEQ ID NO: 7
106 <211> LENGTH: 12
107 <212> TYPE: DNA
108 <213> ORGANISM: Artificial Sequence
110 <220> FEATURE:
111 <223> OTHER INFORMATION: resultant desired oligomer
113 <400> SEQUENCE: 7
114 tttttttttt tt                                     12
117 <210> SEQ ID NO: 8
118 <211> LENGTH: 12
119 <212> TYPE: DNA
120 <213> ORGANISM: Artificial Sequence
122 <220> FEATURE:
123 <223> OTHER INFORMATION: linear sequence
125 <400> SEQUENCE: 8
126 aagaaagaaa ag                                     12
129 <210> SEQ ID NO: 9
130 <211> LENGTH: 39
131 <212> TYPE: DNA
132 <213> ORGANISM: Artificial Sequence
134 <220> FEATURE:
135 <223> OTHER INFORMATION: circular template
137 <400> SEQUENCE: 9
138 cttagagacg aagatcaaac gtctctaaga cttttcttt                                     39
141 <210> SEQ ID NO: 10
142 <211> LENGTH: 117
143 <212> TYPE: DNA
144 <213> ORGANISM: Artificial Sequence

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146 <220> FEATURE:
147 <223> OTHER INFORMATION: multimer product
149 <400> SEQUENCE: 10
150 tcttagagac gtttgatctt cgtctctaag aaagaaaagt cttagagacg tttgatcttc      60
152 gtctctaaga aagaaaagtc ttagagacgt ttgatcttcg tctctaagaa agaaaag      117
155 <210> SEQ ID NO: 11
156 <211> LENGTH: 12
157 <212> TYPE: DNA
158 <213> ORGANISM: Artificial Sequence
160 <220> FEATURE:
161 <223> OTHER INFORMATION: desired oligomer
163 <400> SEQUENCE: 11
164 aagaaagaaa ag      12
167 <210> SEQ ID NO: 12
168 <211> LENGTH: 27
169 <212> TYPE: DNA
170 <213> ORGANISM: Artificial Sequence
172 <220> FEATURE:
173 <223> OTHER INFORMATION: product oligomer
175 <400> SEQUENCE: 12
176 tcttagagac gtttgatctt cgtctct      27
179 <210> SEQ ID NO: 13
180 <211> LENGTH: 34
181 <212> TYPE: DNA
182 <213> ORGANISM: Artificial Sequence
184 <220> FEATURE:
185 <223> OTHER INFORMATION: precircle
187 <400> SEQUENCE: 13
188 gatcagaaaa gaaagaagga ggaagaaaga aaag      34
191 <210> SEQ ID NO: 14
192 <211> LENGTH: 34
193 <212> TYPE: DNA
194 <213> ORGANISM: Artificial Sequence
196 <220> FEATURE:
197 <223> OTHER INFORMATION: circular template
199 <400> SEQUENCE: 14
200 gaaaagaaag aaggaggaag aaagaaaagg atca      34
203 <210> SEQ ID NO: 15
204 <211> LENGTH: 44
205 <212> TYPE: DNA
206 <213> ORGANISM: Artificial Sequence
208 <220> FEATURE:
209 <223> OTHER INFORMATION: multimer product
211 <400> SEQUENCE: 15
212 gatccttttc tttcttcttc cttctttctt ttctgatcct ttct      44
215 <210> SEQ ID NO: 16
216 <211> LENGTH: 34
217 <212> TYPE: DNA
218 <213> ORGANISM: Artificial Sequence

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220 <220> FEATURE:
221 <223> OTHER INFORMATION: desired circular oligomer
223 <400> SEQUENCE: 16
224 ttctttcttt tctgattctt ttctttcttc ctcc 34
227 <210> SEQ ID NO: 17
228 <211> LENGTH: 39
229 <212> TYPE: DNA
230 <213> ORGANISM: Artificial Sequence
232 <220> FEATURE:
233 <223> OTHER INFORMATION: multimer product
235 <400> SEQUENCE: 17
236 gatcagaaaa gaaagaagga ggaagaaaga aaaggatca 39
239 <210> SEQ ID NO: 18
240 <211> LENGTH: 34
241 <212> TYPE: DNA
242 <213> ORGANISM: Artificial Sequence
244 <220> FEATURE:
245 <223> OTHER INFORMATION: oligomer
247 <400> SEQUENCE: 18
248 aaaagaaga aggaggaaga aagaaaagga tcag 34
251 <210> SEQ ID NO: 19
252 <211> LENGTH: 34
253 <212> TYPE: DNA
254 <213> ORGANISM: Artificial Sequence
256 <220> FEATURE:
257 <223> OTHER INFORMATION: oligomer
259 <400> SEQUENCE: 19
260 gatccttttc tttcttcttc cttctttctt ttct 34
263 <210> SEQ ID NO: 20
264 <211> LENGTH: 33
265 <212> TYPE: DNA
266 <213> ORGANISM: Artificial Sequence
268 <220> FEATURE:
269 <223> OTHER INFORMATION: product oligomer
271 <400> SEQUENCE: 20
272 cgagaaaaga aagaaggagg aagaaagaaa aga 33
275 <210> SEQ ID NO: 21
276 <211> LENGTH: 34
277 <212> TYPE: DNA
278 <213> ORGANISM: Artificial Sequence
280 <220> FEATURE:
281 <223> OTHER INFORMATION: circular template
283 <400> SEQUENCE: 21
284 gatcttttct ttcttctctc ttctttcttt tctc 34
287 <210> SEQ ID NO: 22
288 <211> LENGTH: 39
289 <212> TYPE: DNA
290 <213> ORGANISM: Artificial Sequence
292 <220> FEATURE:

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293 <223> OTHER INFORMATION: precircle
295 <400> SEQUENCE: 22
296 agacgaagat caaacgtctc taagactttt ctttcttag      39
299 <210> SEQ ID NO: 23
300 <211> LENGTH: 31
301 <212> TYPE: DNA
302 <213> ORGANISM: Artificial Sequence
304 <220> FEATURE:
305 <223> OTHER INFORMATION: circular oligomer
307 <220> FEATURE:
308 <221> NAME/KEY: misc_feature
309 <222> LOCATION: (4)..(23)
310 <223> OTHER INFORMATION: a, g, c, or t
313 <400> SEQUENCE: 23
W--> 314 aggnnnnnnnn nnnnnnnnnn nnnaaaaaac c      31
317 <210> SEQ ID NO: 24
318 <211> LENGTH: 31
319 <212> TYPE: DNA
320 <213> ORGANISM: Artificial Sequence
322 <220> FEATURE:
323 <223> OTHER INFORMATION: circular oligomer
325 <220> FEATURE:
326 <221> NAME/KEY: misc_feature
327 <222> LOCATION: (12)..(31)
328 <223> OTHER INFORMATION: a, g, c, or t
331 <400> SEQUENCE: 24
W--> 332 aaaaaaccag gnnnnnnnnn nnnnnnnnnn n      31
335 <210> SEQ ID NO: 25
336 <211> LENGTH: 31
337 <212> TYPE: DNA
338 <213> ORGANISM: Artificial Sequence
340 <220> FEATURE:
341 <223> OTHER INFORMATION: circular oligomer
343 <220> FEATURE:
344 <221> NAME/KEY: misc_feature
345 <222> LOCATION: (10)..(29)
346 <223> OTHER INFORMATION: a, g, c, or t
349 <400> SEQUENCE: 25
W--> 350 tgggttttttn nnnnnnnnnn nnnnnnnnnc c      31
353 <210> SEQ ID NO: 26
354 <211> LENGTH: 31
355 <212> TYPE: DNA
356 <213> ORGANISM: Artificial Sequence
358 <220> FEATURE:
359 <223> OTHER INFORMATION: circular oligomer
361 <220> FEATURE:
362 <221> NAME/KEY: misc_feature
363 <222> LOCATION: (7)..(26)
364 <223> OTHER INFORMATION: a, g, c, or t

```

Use of n and / or Xaa has been detected in the Sequence Listing. Review the Sequence Listing to ensure a corresponding explanation is present in the <220> to <223> fields of each sequence using n or Xaa.

## VERIFICATION SUMMARY

DATE: 12/07/2001

PATENT APPLICATION: US/09/997,931

TIME: 13:38:05

Input Set : A:\220.00010150.ST25.txt

Output Set: N:\CRF3\12072001\I997931.raw

L:10 M:270 C: Current Application Number differs, Replaced Current Application No  
L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date  
L:314 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23  
L:332 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24  
L:350 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25  
L:368 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26  
L:460 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33  
L:478 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:34  
L:562 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:38  
L:1008 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:73  
L:1053 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:76  
L:1194 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (88) SEQUENCE:  
L:1223 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:90  
L:1364 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:101  
L:1375 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (102) SEQUENCE:  
L:1383 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (103) SEQUENCE:  
L:1457 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (110) SEQUENCE: